

**UNIVERSITY OF SWAZILAND**  
**Faculty of Health Sciences**

**BSc ENVIRONMENTAL HEALTH  
SCIENCES-ENVIRONMENTAL  
MANAGEMENT**

**MAIN EXAMINATION PAPER: MAY 2010**

**TITLE OF PAPER** : ENVIRONMENTAL POLLUTION  
ASSESSMENT

**COURSE CODE** : EHS 551

**DURATION** : 2 ½ HOURS

**MARKS** : 100

**INSTRUCTIONS** : ANSWER FOUR QUESTIONS

: EACH QUESTION CARRIES 25 MARKS

: NO PAPER SHOULD BE BROUGHT INTO  
OR OUT OF THE EXAMINATION ROOM

: BEGIN EACH QUESTION ON A  
SEPARATE SHEET OF PAPER

**DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS  
GRANTED BY THE INVIGILATOR**

**QUESTION ONE**

- A) ISO 14001 is an international standard that is increasingly used in dealing with environmental pollution problems. Outline the main elements of this standard and the process of its development. [15]
- B) Water Pollution in a densely populated settlement may be due to many reasons. Outline the likely causes and discuss how you would go about investigating the pollution. [10]

**QUESTION TWO**

- A) Describe how phytoremediation help in pollution clean up [5]
- B) In dealing with pollution two different concepts stand out as very important. These are pollution prevention and pollution clean up. Describe and discuss these methods outlining problems associated with each [15]
- C) Describe the project centric approaches in pollution assessment [5]

**QUESTION THREE**

- A) Comment on aspects that qualify a risk factor and why identification of a risk factor is more difficult than identification of an adverse effect. [15]
- B) What would be the dangers and advantages of too much reliance on the 'precautionary approach' [10]

**QUESTION FOUR**

- A) Contrast the two systems involved in determining the burden of proof for environmental risk. [10]
- B) Outline the legal framework for pollution control in Swaziland. [10]
- C) One of the most popular methods of dealing with pollution is '*purchase of pollution removal materials*' Explain this method giving at least four examples where this can be applied [5]

**QUESTION FIVE**

- A) Contrast the two pollution detection modes in common practice [5]
- B) What would normally feature in a pollution assessment report [5]
- C) Air pollution control entails focusing on three key aspects. With the aide of a sketch diagram explain how these help you in successfully carrying out any pollution assessment exercise. [10]
- D) Evaluate the use of GIS applications in pollution assessment [5]
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